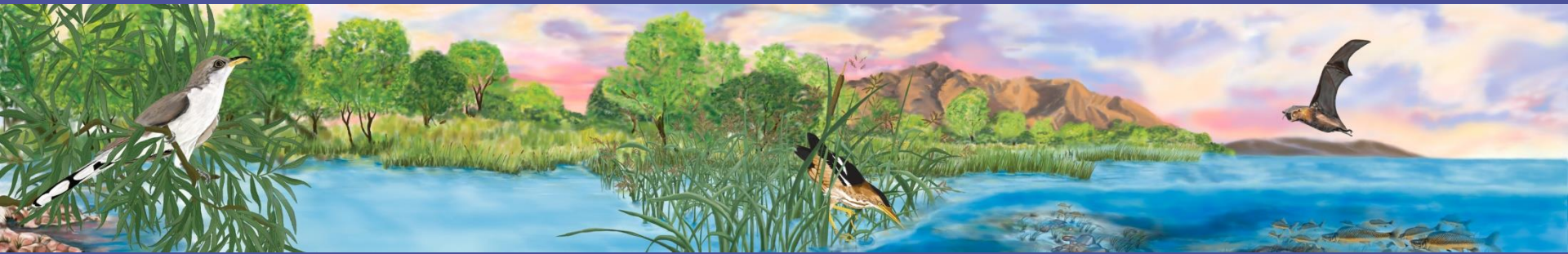


# Lower Colorado River Multi-Species Conservation Program



*Balancing Resource Use and Conservation*

## LOWER COLORADO RIVER MULTI-SPECIES CONSERVATION PROGRAM



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# Lower Colorado River Multi-Species Conservation Program

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## LCR MSCP FY2013 Funding Summary

FY2013 Total Required Funding	FY2013 Approved Estimate	FY2013 Actual Obligations	Cumulative Program Accomplishment
\$34,452,540	\$34,620,216	\$32,198,080.09	\$163,659,599.49





# Lower Colorado River Multi-Species Conservation Program

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## FY2013 Program Element Accomplishment

Program Administration	\$ 975,426.99 (3%)
Fish Augmentation	\$ 1,997,897.70 (6%)
Species Research	\$ 3,501,042.11 (11%)
System Monitoring	\$ 2,554,600.59 (8%)
Conservation Area D&M	\$ 13,998,352.10 (44%)
Post Development Monitoring	\$ 1,172,345.50 (4%)
AMP	\$ 1,272,792.83 (4%)
Habitat Maintenance Fund	\$ 5,629,500.00 (17%)
Remedial Measure Fund	\$ 998,298.00 (3%)
Public Outreach	\$ 97,824.27 (*%)
<b>TOTAL</b>	<b>\$ 32,198,080.09</b>



# Lower Colorado River Multi-Species Conservation Program

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## 2013 Restoration Accomplishments

- Site Selection
- Restoration Research
- Conservation Area Development & Management





# Lower Colorado River Multi-Species Conservation Program

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## Site Selection Activities

- Pretty Water LUA signed (566 acres of HM)
- Planet Ranch
- Mohave Valley Conservation Area (56 acres of Bkwtr))
- PVER South (350-450 acres)
- Parker Dam Camp (Drilling)
- Virgin River (Piezometers)
- Needles Lagoon (Feasibility Study)

## Restoration Research

- Soil & Groundwater Monitoring Network



# Lower Colorado River Multi-Species Conservation Program



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**PVER-South**



# Lower Colorado River Multi-Species Conservation Program



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## Pretty Water Conservation Area



# Lower Colorado River Multi-Species Conservation Program



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## Needles Lagoon



# Lower Colorado River Multi-Species Conservation Program



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## 2013 Planting Accomplishments

Palo Verde Ecological Reserve (Phase 8): 38 acres of HM

Cibola NWR Unit #1: 72 acres of CW

Laguna Division Cons. Area (Marsh Reach 1)

**TOTAL: 110 acres**



# Lower Colorado River Multi-Species Conservation Program



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## Marsh Planting at Laguna



# Lower Colorado River Multi-Species Conservation Program



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**New Conservation Area**

**Yuma East Wetlands (392 acres)**





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Conservation Area	Established LC Types	Managed Acreage	Available Lands
E1: Beal Lake Riparian Restoration	116	116	116
E4: Palo Verde Ecological Reserve	1,023	1,023	1,023
E5: Cibola Valley Conservation Area <sup>1</sup>	670	779	1,282
E9: Hart Mine Marsh	255	255	255
E14: Imperial Ponds Conservation Area <sup>2</sup>	92	126	126
E25: Big Bend	15	15	15
E24: Cibola NWR	334	950	950
E27: Laguna Division Conservation Area	0	0	1,107
E28: Yuma East Wetlands	392	392	392
E31: Hunters Hole	44	44	44
E31: Pretty Water Conservation Area	0	566	566
Total	2,941	4,266	5,876





# Lower Colorado River Multi-Species Conservation Program

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## 2014 Development

Laguna Division CA:	Cottonwood-willow & honey mesquite in Reach 1
Laguna Division CA:	Marsh in Reach 2

## 2015 Development

Laguna Division CA	Cottonwood-willow in Reach 2 (1,107 acres)
Pretty Water CA	566 acres of honey mesquite
Cibola Valley CA	72 acres of honey mesquite
Mohave Valley Backwater	Construction started



# Lower Colorado River Multi-Species Conservation Program

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## 2013 Wildlife Accomplishments

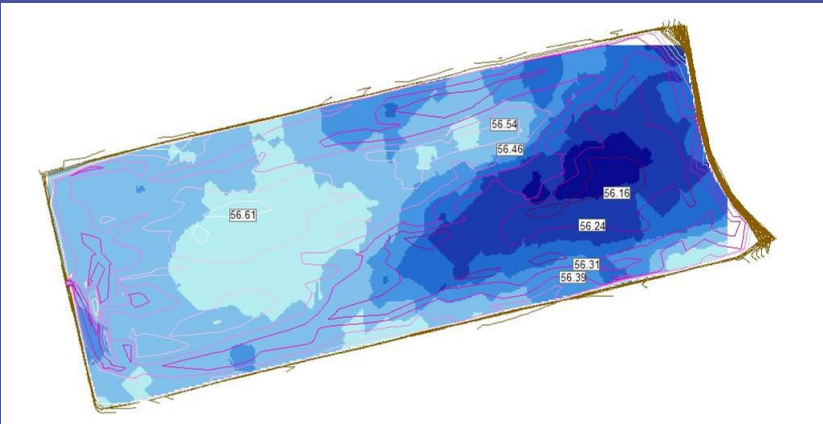


# Lower Colorado River Multi-Species Conservation Program



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## SPECIES RESEARCH





# Lower Colorado River Multi-Species Conservation Program

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## *Balancing Resource Use and Conservation*

- Completed C5 Effects of Abiotic Factors on Insect Populations in Riparian Restoration Sites.
- Continued to develop effective methods to detect covered and evaluation species with known levels of accuracy. Detected the first red bat roosting cluster recorded on the LCR at CVCA.
- Measured characteristics of habitat occupied by covered and evaluation species to determine the components which are critical to support breeding populations.
- Continued a genetics study (C43) to characterize California leaf-nosed bat populations at roost sites.



# Lower Colorado River Multi-Species Conservation Program



*Balancing Resource Use and Conservation*  
**SYSTEM MONITORING**





# Lower Colorado River Multi-Species Conservation Program

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## *Balancing Resource Use and Conservation*

- Marsh Bird Surveys detected up to 62 clapper rails, 24 least bitterns, and 1 black rail per survey period.
- SWFL Presence/Absence Surveys conducted at 47 sites documented 15 breeding adults. Nest Success was 18%. (Note: Paranaghat NWR was not included this year.)
- MAPS was conducted at three sites: Beal Lake, Cibola NWR Unit #1, CVCA; 466 birds were captured, including 3 LCR MSCP Species (YWAR, SUTA, and BEVI).





# Lower Colorado River Multi-Species Conservation Program

## *Balancing Resource Use and Conservation*

- Riparian Bird Monitoring was conducted at 80 Survey Plots; 161 species were recorded including LCR MSCP covered species (YWAR, GIWO, SUTA, and BEVI).
- Yellow-billed cuckoo surveys were conducted at 44 sites including all LCR MSCP Conservation Areas. Cuckoos were detected 335 times and nested at Beal Lake, PVER, CVCA, Cibola NWR Unit #1 and YEW; 15 nests located with reduced effort. For the first time we confirmed breeding at PVER Phase 6 and 7 and at CVCA Phase 3.
- Cotton rats were monitored and located: near the Yuma, PVER, Cibola NWR Unit #1, CVCA, areas within Havasu NWR and Big Bend. SIHI found at Yuma East Wetlands and Imperial Valley near Holtville.



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## *Balancing Resource Use and Conservation*

- Lowland Leopard Frog and Colorado River Toad Surveys were conducted and lowland leopard frogs were located within the Bill Williams NWR and east of Planet Ranch.
- Four permanent Anabat Stations continue to operate with all four LCR MSCP bat species detected. Out-flight counts were conducted at several mines.





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## **Big Bend Conservation Area**

- 1 LCR MSCP covered species

## **Beal Lake Conservation Area**

- 7 LCR MSCP Covered Species

## **Cibola NWR (Unit # 1 & HMM)**

- 12 LCR MSCP Covered Species

## **Cibola Valley Conservation Area**

- 7 LCR MSCP Covered Species

## **Imperial Conservation Area**

- 1 LCR MSCP Covered Species



**Post-Development Monitoring**



# Lower Colorado River Multi-Species Conservation Program

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## Hunter's Hole

- 0 LCR MSCP covered species

## Palo Verde Ecological Reserve

- 8 LCR MSCP Covered Species

## Yuma East Wetlands

- 4 LCR MSCP covered species



Post-Development Monitoring

# Lower Colorado River Multi-Species Conservation Program



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## 2013 Fisheries Accomplishments





# Lower Colorado River Multi-Species Conservation Program

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## Fish Augmentation

Reach 2 (RASU 5):

Stocked 15,907 RASU

Reaches 3-5 (RASU 3):

Stocked 12,303 RASU

Total 2013 RASU = 28,210

Reaches 3-5 (BONY 3):

Stocked 6,318 BONY



# Lower Colorado River Multi-Species Conservation Program



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## Larval Collection

- USBR staff collected 12,402 RASU larvae
- Other agencies collected 12,522 RASU larvae
- Total of 24,924 RASU larvae collected in 2013



# Lower Colorado River Multi-Species Conservation Program



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## Fisheries Monitoring 2013 - D8

- Ongoing and recent successful recruitment in Lake Mead suspected; juvenile RASU captured at the CR inflow and RASU larvae continue to be collected at 3 sites in Lake Mead
- Current RASU population estimates in Reach 2 and 3 are 3,588 and 4,524 (derived), respectively
- Wild-born RASU larvae collected in Reach 4; persistence of adult RASU recorded below Palo Verde Diversion Dam (A-10 backwater)



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## Fisheries Research Highlights 2013

C31: RASU population genetic variation continue to be maintained in Lake Mohave

C46: Blood chemistry stress indicators were measured for BONY and RASU after routine handling and protocols were suggested to alleviate adverse effects

C11: Predator avoidance conditioning (ongoing) indicates significantly greater survival for conditioned BONY in laboratory tests





## Lower Colorado River Multi-Species Conservation Program



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# Lower Colorado River Multi-Species Conservation Program

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*Balancing Resource Use and Conservation*

FY2015 Work Plan and Budget





# Lower Colorado River Multi-Species Conservation Program

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## FY2015 Funding Requirements\*

(Preliminary Inflation Rate = 1.360%)

Funding Entity	FY2015 Contributions	FY2015 Adjusted Contributions
<b>Federal</b>	<b>\$18,727,200.00</b>	<b>\$18,727,200.00</b>
<b>Non-Federal</b>	<b>\$18,727,200.00</b>	<b>\$18,727,200.00</b>
<i>California</i>	<i>\$ 9,363,600.00</i>	<i>\$10,299,960.00</i>
<i>Arizona</i>	<i>\$ 4,681,800.00</i>	<i>\$ 2,809,080.00</i>
<i>Nevada</i>	<i>\$ 4,681,800.00</i>	<i>\$ 5,618,160.00</i>
<b>TOTAL</b>	<b>\$37,454,400.00</b>	<b>\$37,454,400.00</b>





# Lower Colorado River Multi-Species Conservation Program

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## FY2015 Proposed Work Plans

Program Administration	\$ 1,384,480
Fish Augmentation	\$ 2,525,000
Species Research	\$ 3,624,000
System Monitoring	\$ 3,475,000
Conservation Area D&M	\$ 9,351,000
Post Development Monitoring	\$ 1,485,000
AMP	\$ 1,550,000
Habitat Maintenance Fund	\$ 4,855,200
Remedial Measures Fund	\$ 361,760
Public Outreach	\$ 100,000
<b>TOTAL</b>	<b>\$28,711,440</b>



# Lower Colorado River Multi-Species Conservation Program



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## FY2015 Budget Adjustments

Total FY2015 Funding Requirements	\$37,454,400
Federal Deficit Expected in FY2015	\$2,576,200
FY2015 Land and Water Fund Contributions	\$6,166,760
<b>TOTAL Proposed FY2015 Work Plans</b>	<b>\$28,711,440</b>

